**SERVICE DATA**
**FILE NO. 140 - 170**

# TOSHIBA

## STEREO TURNTABLE

# SR-V12

## SPECIFICATIONS

| | |
|---|---|
| Drive system: | Belt drive |
| Motor type: | DC Servo-controlled motor |
| Rotational speed: | 2-speed (33-1/3 and 45 rpm) |
| Turntable platter: | 28 cm |
| Tonearm: | Static balanced straight pipe tonearm<br>Effective length: 195 mm<br>Overhang: 13 mm |
| Tracking error: | +3°54′ ~ −2°27′ |
| Cartridge: | Vertical magnet type (VM) C-16M<br>Output voltage: 0.5 mV/cm/sec<br>Frequency response: 20 ~ 20,000 Hz<br>Channel balance (1 kHz): < 2 dB<br>Crosstalk (1 kHz): > 19.5 dB<br>Load resistance: 47K ohms<br>Stylus tip: 15 μm diamond-tipped spherical stylus<br>Dynamic compliance: 5 mm/N<br>Tracking force: 3.5 gf<br>Stylus replacement: N-16D |
| Wow and flutter: | DIN less than 0.12% (zero to peak)<br>WRMS: less than 0.09% |
| Rumble: | DIN A: lower than −38 dB<br>DIN B: lower than −60 dB |
| Power supply voltage: | DC 9V ⎓ |
| Power consumption: | 45 mA |
| Major dimensions: | with cover closed<br>340(W) x 104(H) x 334(D) mm<br>with cover fully opened<br>340(W) x 335(H) x 370(D) mm |
| Weight: | Approx. 2.2 kg |
| Accessory: | 45 rpm record adaptor |

Specifications are subject to change without notice.

TA, TC, TE, TU, AY, VF

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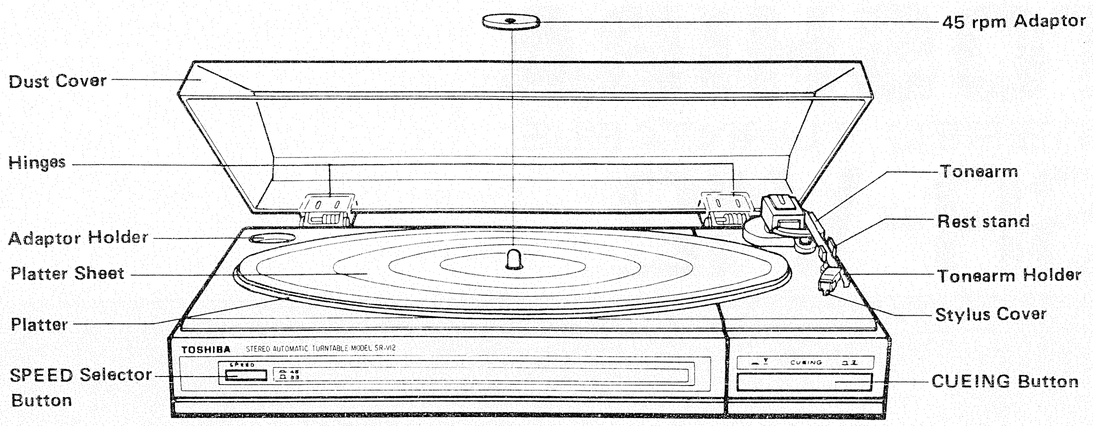
# 1. OPERATING CONTROLS

[FRONT]


45 rpm Adaptor
Dust Cover
Hinges
Tonearm
Rest stand
Adaptor Holder
Platter Sheet
Tonearm Holder
Platter
Stylus Cover
TOSHIBA STEREO AUTOMATIC TURNTABLE MODEL SR-V12
SPEED
SPEED Selector Button
CUEING
CUEING Button

[REAR]

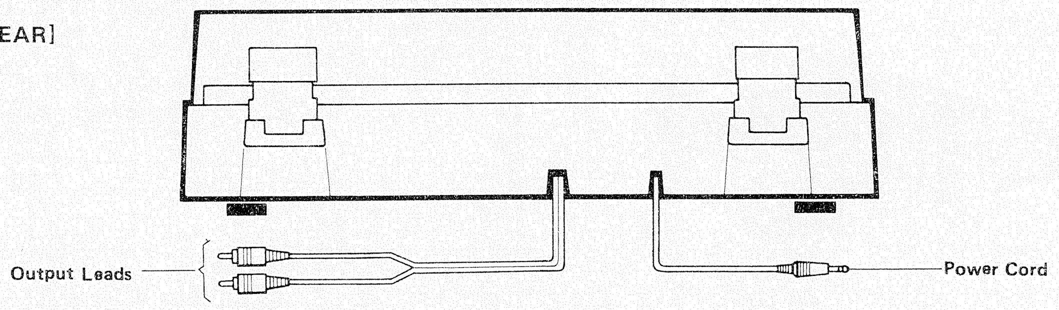

Output Leads
Power Cord

Figure 1.

# 2. DISASSEMBLY INSTRUCTIONS

## BOTTOM PLATE REMOVAL

1. Remove four insulators Ⓐ.
2. Remove four screws Ⓑ.
3. Remove the Bottom plate from the cabinet.

## TURNTABLE REMOVAL

1. Remove the bottom plate.
2. Pull the shaft fixing part of the cabinet bottom in the arrow direction to remove the turntable.

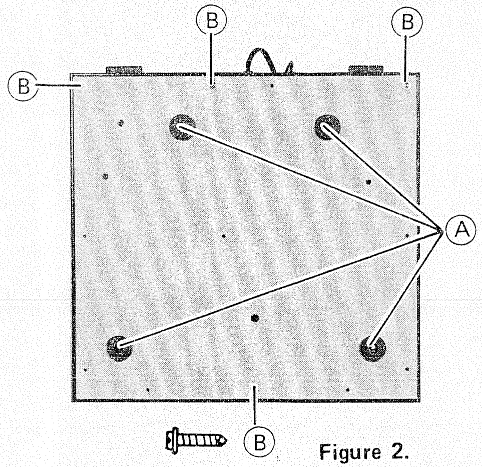


Figure 2.

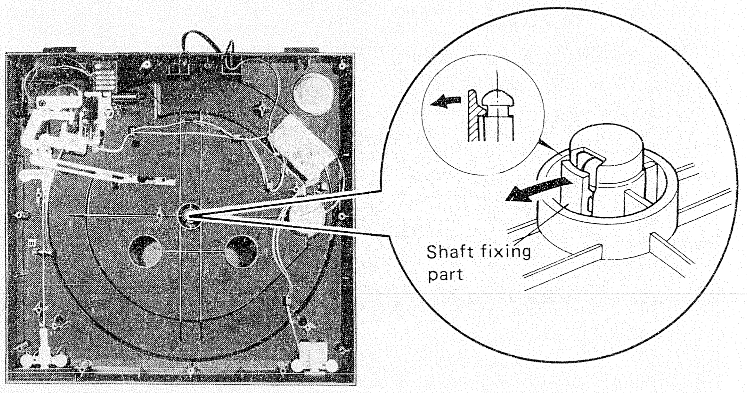

Shaft fixing part

Figure 3.

**CAUTION:** Before returning the unit to the customer, check that the resistance between both blades of AC plug and **(U.S.A. only)** any accessible metal parts is more than 3MΩ after completion of servicing, using the circuit tester.

# 3. ADJUSTMENTS

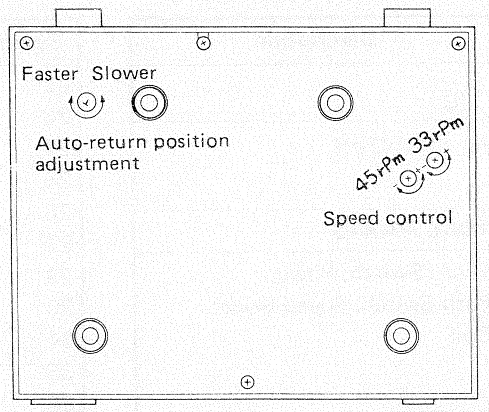

Faster Slower
Auto-return position adjustment
45rPm 33rPm
Speed control

Figure 4.

## 1. AUTO-RETURN POSITION ADJUSTMENT

Turn the adjustment screw with a screw driver to adjust the auto-return position.

Using a test record (TX-3002) adjust so that the rotation is within 11 and 19 counts.

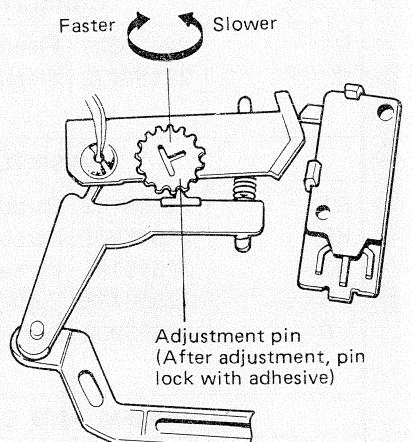

Faster
Slower
Adjustment pin
(After adjustment, pin lock with adhesive)

Figure 5.

## 2. SPEED CONTROL

**NOTE:** Adjust the speed at 45 rpm prior to adjust at 33 rpm.

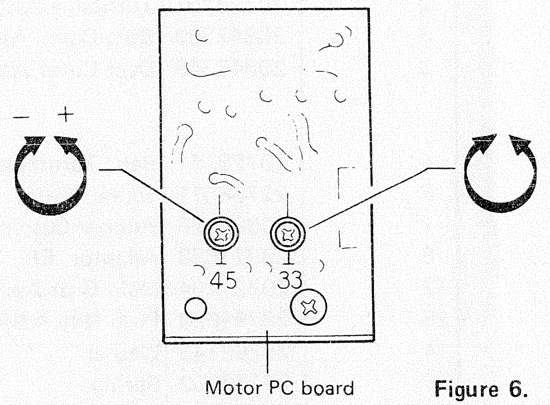

– +
45
33
Motor PC board

Figure 6.

## 3. STYLUS HEIGHT ADJUSTMENT

Turn the lifter screw clockwise or counterclockwise to adjust the stylus height.

The distance between stylus tip and record surface should be adjusted from 5 to 12 mm.

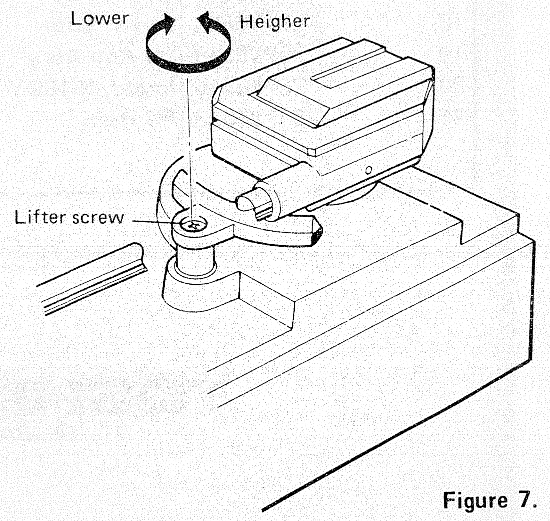

Lower
Heigher
Lifter screw

Figure 7.

# 4. ELECTRICAL PARTS LOCATIONS

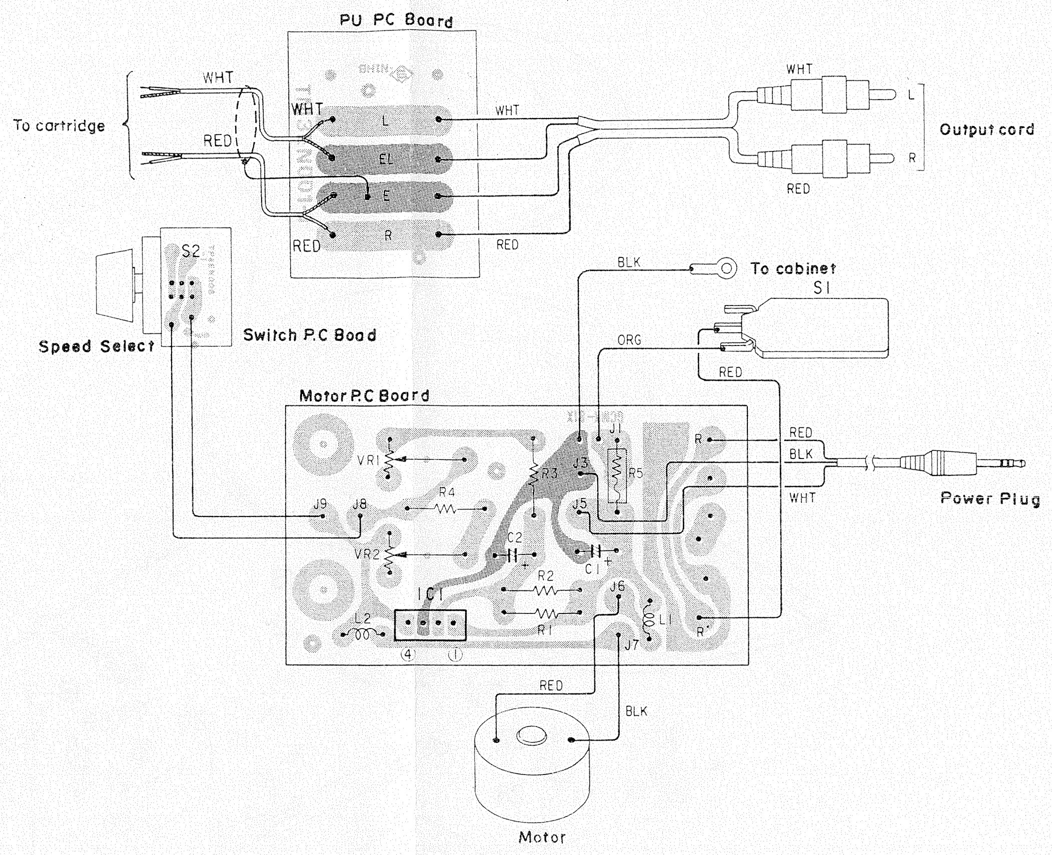
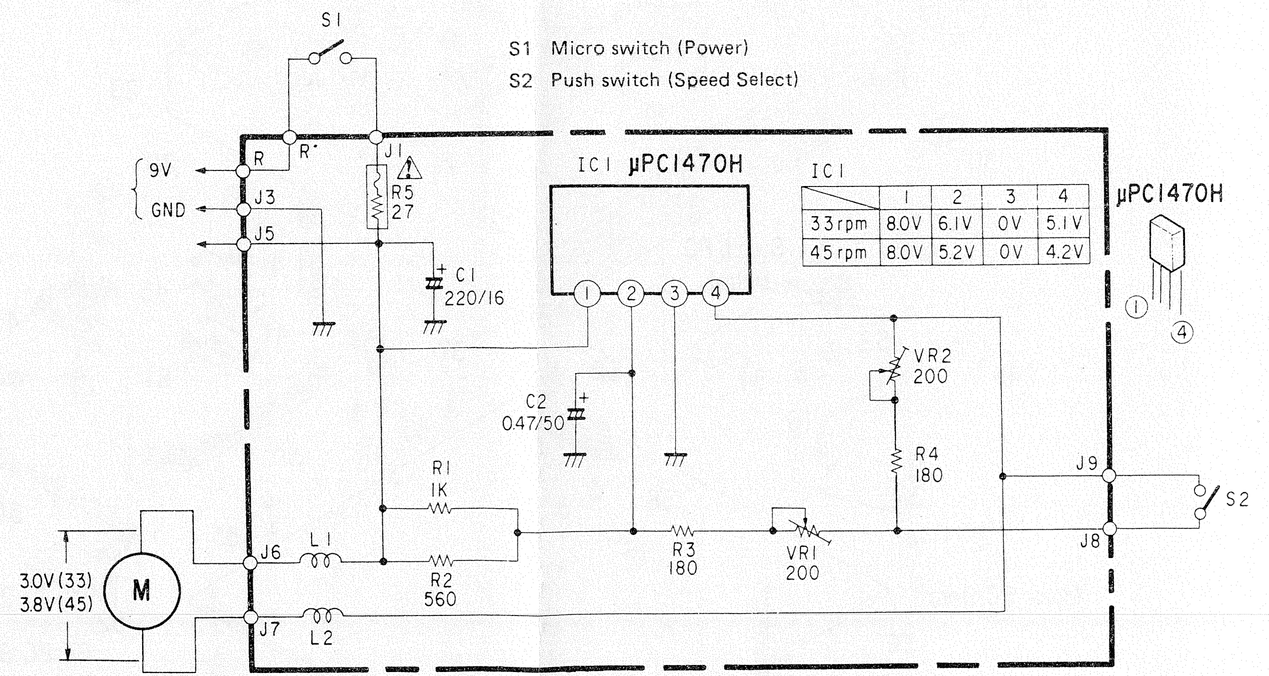

PU PC Board
To cartridge
WHT
RED
WHT
L
EL
E
R
RED
WHT
RED
Output cord
L
R
WHT
RED
S2
Speed Select
Switch P.C Boad
BLK
To cabinet
S1
ORG
RED
Motor P.C Board
J1
VR1
R3
J3
R5
R
RED
BLK
WHT
Power Plug
J9
J8
R4
J5
C2
VR2
R2
C1
J6
IC1
L2
R1
L1
J7
R'
④
①
RED
BLK
Motor

Figure 8.

# 5. SCHEMATIC DIAGRAM


S1
9V
GND
R
R'
J3
J5
J1
R5
27
C1
220/16
IC1 μPC1470H
①
②
③
④
C2
0.47/50
VR2
200
R4
180
μPC1470H
①
④
R1
1K
J9
S2
J8
30V(33)
3.8V(45)
M
J6
L1
R2
560
R3
180
VR1
200
J7
L2

S1 Micro switch (Power)
S2 Push switch (Speed Select)

IC1

| | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| 33rpm | 8.0V | 6.1V | 0V | 5.1V |
| 45rpm | 8.0V | 5.2V | 0V | 4.2V |

Figure 9.

## 6. EXPLODED VIEW MECHANISM AND CABINET

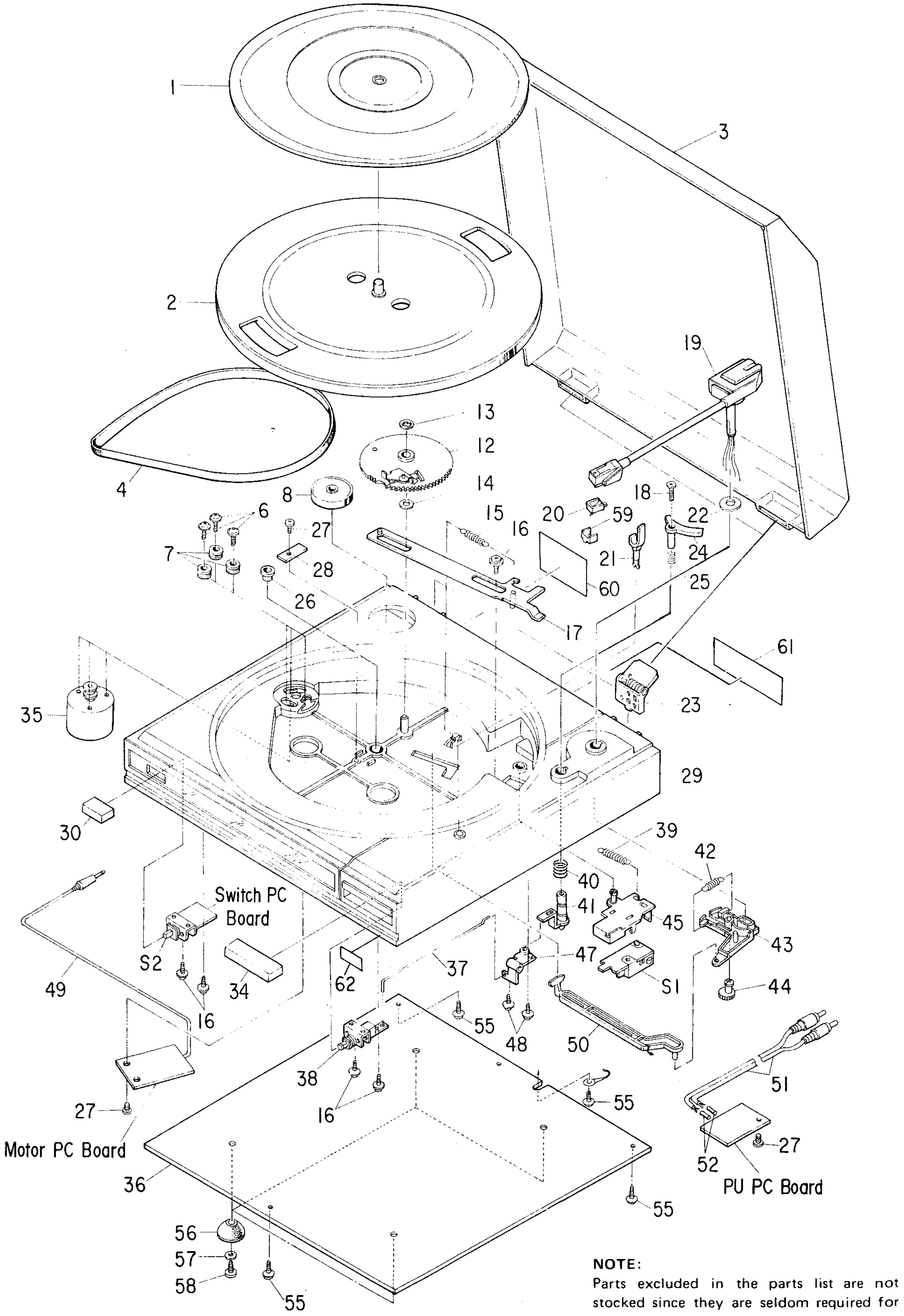


Figure 10.

NOTE:
Parts excluded in the parts list are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

## 7. PARTS LIST

| Symbol No. | Part No. | Description |
|---|---|---|
| **IC** | | |
| IC1 | 22117502 | IC, μPC1470H |
| **ELECTRICAL PARTS** | | |
| S1 | 22196790 | Micro Switch, Power |
| S2 | 22196788 | Push Switch, Speed Select |
| L1, 2 | 22210210 | Coil |
| **CAPACITORS** | | |
| C1 | 22485221 | Electrolytic, 220mfd, 16V |
| C2 | 22488478 | Electrolytic, 0.47mfd, 50V |
| **RESISTORS** | | |
| R1 | 22545102 | Carbon Film, 1K ohm, ¼W, J |
| R2 | 22545561 | Carbon Film, 560 ohm, ¼W, J |
| R3, 4 | 22545181 | Carbon Film, 180 ohm, ¼W, J |
| ⚠ R5 | 22500118 | Fusible, 27 ohm, ¼W, J |
| VR1, 2 | 22658902 | Semi-fixed, 200 ohm |
| **MECHANISM AND CABINET PARTS** | | |
| 1 | 20723170 | Turntable Sheet |
| 2 | 20723167 | Turntable Ass'y |
| 3 | 20847350 | Dust Cover Ass'y (Europe, UK) |
| 3 | 20847349 | Dust Cover Ass'y (USA, Canada)<br>(Australia)<br>(Others) |
| 4 | 20728141 | Belt, Turntable |
| 6 | 22708671 | Screw, Motor |
| 7 | 20881328 | Rubber Cushion, Motor |
| 8 | 20971653 | Adaptor, EP |
| 12 | 20721104 | Main Gear Ass'y |
| 13 | 20798020 | Push Nut, 4.0ϕ |
| 14 | 25766143 | Washer |
| 15 | 25776962 | Spring |
| 16 | 22708672 | Screw, 3.0ϕ x 10 mm, Z |
| 18 | 22708673 | Screw, Lifter |
| 19 | 20788246 | PU Arm Ass'y |
| 20 | 20788446 | Stylus, N-16DY |
| 21 | 20731326 | PU Rest |
| 22 | 25766329 | Washer |
| 23 | 20861132 | Hinge, Dust Cover |
| 24 | 20743182 | Lifter |
| 25 | 25777302 | Spring, Lifter |
| 26 | 20725099 | Holder, Center Shaft |
| 27 | 22708677 | Screw, 3.0ϕ x 8 mm |
| 29 | 20811466 | Cabinet Ass'y |
| 30 | 25886884 | Knob, Speed Select |
| 34 | 25886885 | Knob, Cueing |
| 35 | 25792085 | Motor Ass'y |
| 36 | 20824080 | Bottom Plate |
| 38 | 22196789 | Switch Ass'y |
| 39 | 25776963 | Spring |
| 40 | 25777579 | Spring |
| 41 | 20764288 | Lift Shaft |
| 42 | 25777301 | Spring |
| 43 | 20754266 | PU Stopper |
| 44 | 25749177 | Adjust Pin |
| 45 | 20754267 | Switch Base |
| 47 | 20754268 | Cueing Arm |
| 48 | 22708674 | Screw, 3.0ϕ x 8 mm, Z |
| 49 | 22170631 | DC Cord |
| 50 | 20754269 | Trip Lever |
| 51 | 22170632 | Output Cord |
| 55 | 22708675 | Screw, 3.0ϕ x 10 mm, Z |
| 56 | 20842197 | Insulator Ass'y |
| 57 | 25766330 | Washer |
| 58 | 22708676 | Screw, 3.0ϕ x 12 mm, Z |
| 59 | 20788247 | Stylus Cover |
| 60 | 22868071 | Nameplate |
| 61 | 22900632 | Caution Label (Europe, UK)<br>(Australia) |
| 61 | 22900633 | Caution Label (USA, Canada)<br>(Others) |
| **ACCESSORIES** | | |
| AC01 | 22904744 | Owner's Manual (Europe) |
| AC01 | 22904743 | Owner's Manual (UK, Australia) |
| AC01 | 22904745 | Owner's Manual (Others) |
| AC01 | 22904746 | Instraction Sheet (USA, Canada) |

**TOSHIBA CORPORATION**
1-1, SHIBAURA 1-CHOME, MINATO-KU, TOKYO 105, JAPAN